

## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

- (Currently Amended) An article comprising:
- a classifier wheel;
- a disk defining a concentric circular opening; and
- a fastener for concentrically attaching the disk to a particle outlet opening of [[a]] the classifier wheel, wherein said article is fixed by a plurality of vanes to the lower surface defining a second concentric circular opening within the first concentric circular opening and reduces a diameter of the first concentric circular opening.



- 2. (Previously Presented) An article in accordance with **claim 1**, wherein a relative thickness of the disk is greater adjacent the particle outlet and lesser adjacent a periphery of the disk.
- 3. (Previously Presented) An article in accordance with **claim 1**, further comprising a lip or rim adjacent to the concentric circular opening said lip having a thickness of from about 1.5 to about 5 times a relative thickness of the disk.
- 4. (Previously Presented) An article in accordance with **claim 1**, wherein a diameter of the circular opening is nonadjustable.
- 5. (Previously Presented) An article in accordance with **claim 1**, wherein a diameter of the circular opening is adjustable.
- 6. (Previously Presented) An article in accordance with **claim 1**, wherein a diameter of the circular opening is from about 1 centimeter to about 10,000 centimeters.

- 7. (Previously Presented) An article in accordance with **claim 1**, wherein a diameter of the disk is from about 10 centimeters to about 1,000 centimeters.
- 8. (Original) An article in accordance with **claim 1**, wherein the fastener is one or more bolts or screws.
- 9. (Original) An article in accordance with **claim 1**, wherein the fastener is one or more clamps.
  - 10. (Previously Presented) A classifier wheel comprising:
- an upper solid surface and a lower surface defining a first concentric circular opening therein;
- a plurality of blade vanes connecting the upper surface to the lower surface and defining a peripheral edge of the upper and lower surfaces, and
  - an article comprising:
  - a disk defining a concentric circular opening; and
- a fastener for concentrically attaching the disk to a particle outlet opening of said classifier wheel and wherein said article is fixed to the lower surface defining a second concentric circular opening within the first concentric circular opening and reduces a diameter of the first concentric circular opening.
- 11. (Original) A classifier wheel in accordance with **claim 10**, wherein the wheel has an internal height(H) of from about 10.0 centimeters to about 20.0 centimeters.
- 12. (Original) A classifier wheel in accordance with **claim 10**, wherein the wheel has a lower surface diameter(D) of from about 20.0 centimeters to about 30.5 centimeters.
- 13. (Original) A classifier wheel in accordance with **claim 10**, wherein the second circular opening has a diameter(d) of from about 5.0 centimeters to about 13.5 centimeters.



- 14. (Original) A classifier wheel in accordance with **claim 10**, wherein the upper surface and the lower surface are substantially parallel.
- 15. (Previously Presented) A classifier wheel in accordance with **claim**10, wherein the upper surface and the lower surface are inwardly curvilinear from about a peripheral edge of the wheel to about the center of the wheel.
- 16. (Previously Presented) An apparatus for the classification of solid particulates entrained in a fluid, comprising:
- a housing containing a feed inlet, a fine fraction outlet, and a coarse fraction outlet; and
- a classifier wheel comprising an upper solid surface and a lower surface defining a first concentric circular opening therein;
- a plurality of blade vanes connecting the upper surface to the lower surface at the peripheral edges of the upper and lower surfaces, and

an article comprising:

- a disk defining a concentric circular opening; and
- a fastener for concentrically attaching the disk to a particle outlet opening of said classifier wheel and wherein said article is fixed to the lower surface which forms a second concentric circular opening within the first concentric circular opening and reduces a diameter of the first concentric circular opening.
- 17. (Original) An apparatus in accordance with **claim 16**, wherein the fluid is compressed air.
- 18. (Original) An apparatus in accordance with **claim 16**, wherein the solid particulates are a toner formulation comprising a pigment and a resin.

19. (Original) A process for separating and classifying particulates in an apparatus in accordance with **claim**/16, comprising:

rotating the classifier wheel at speed of from about 500 to about 5,000 revolutions per minute; and

introducing to the apparatus a solid particle feed comprising a fluid stream containing particulates of from about 0.1 to about 10,000 microns in diameter, wherein the fine particles in the particle feed move toward the center of the wheel and thereafter exit the classifier wheel and housing via the fine fraction outlet opening, and the coarse particles move toward the periphery of the wheel and exit the wheel via the coarse fraction outlet.

- 20. (Original) A process in accordance with **claim 19**, wherein the particulates in the fluid stream are continuously classified within the apparatus to permit a separated fine particle fraction with a weight average particle diameter of from about 1 to about 10 micrometers and a standard deviation of from about 0.1 to about 0.5 micrometers.
- 21. (Original) A process in accordance with **claim 20**, wherein from about 10 to about 10,000 pounds of the fine particle fraction is separated in from about 1 to about 24 hours.
  - 22. (Currently Amended) A kit An apparatus comprising:

## a classifier wheel;

a disk defining a concentric circular opening; and

at least one fastener adapted to attach the disk to a particle outlet opening of [[a]] the classifier wheel wherein said classifier wheel further comprises an upper solid surface and a lower surface defining a first concentric circular opening therein and a plurality of blade vanes connecting the upper surface to the lower surface.

23. (Previously Presented) An article in accordance with **claim 1**, further comprising a centrifugal value for adjusting the diameter of the circular opening.

